

**NORTH RAILROAD AVENUE PLUME  
SUPERFUND SITE**

**Española, New Mexico**

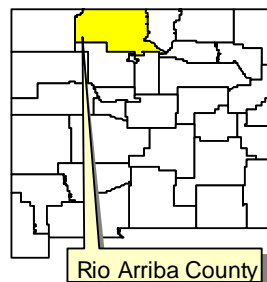
(within the exterior boundaries of  
the Santa Clara Indian Reservation)

**EPA Region 6**

**EPA ID# NMD986670156**

**State Congressional District: 3**

**Fact Sheet Updated: July 2004**



**SITE DESCRIPTION**

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- Location:** The site is located in Española, Rio Arriba County, New Mexico, within the exterior boundary of the Santa Clara Indian Reservation. The Santa Clara Pueblo is located one mile south of the site.
- Setting:** The site consists of a contaminated ground water plume extending approximately 58 acres in an elliptical shape 3/4 miles south of 113 North Railroad Avenue. The Norge Town Laundromat and Dry Cleaning operation is the source of the contamination.
- Population:** The Site is located in the central business district within the town of Española, not far area from a mixed residential area, some small farms, and service businesses and light industrial sites. According to the 1990 U.S. Census, Española has a population of 8,389 people. The Hispanic and Native American community comprise approximately 50% of the population. The Santa Clara Pueblo has a population of 2,400 people.

**PRESENT STATUS AND ISSUES**

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- In September 2001, EPA signed a Record of Decision describing the selected remedy to cleanup the groundwater. The major components of the selected remedy includes five phases of treatment. These phases may take place concurrently and include, the mobilization and removal of the dense, non-aqueous phase liquid (DNAPL) source (which is the principal threat waste at the Site). this process will be accomplished through surfactant and /or co-solvent treatment. The second phase consists of remediating the "hot spots" and the down-gradient, dissolved-phase plume in the shallow zone through enhanced in-situ bioremediation. The third phase consists of treatment in the deep zone through enhanced in-situ bioremediation. The fourth phase consists of remediating the soils within the vadose zone through soil vapor extraction at the area affected adjacent to the source area after the DNAPL is treated. The fifth phase consists of monitoring throughout the Site area to ensure effectiveness of the remedy and protectiveness of human health and the environment. NMED contracted out the Remedial Design work for the site remedy.
- EPA and the New Mexico Environment Department have participated in numerous open houses with the community and the pueblo throughout the Superfund process. A Technical Assistance Grant of \$50,000 was awarded to the El Rio Arriba Health Association in July 2000.

- EPA also provided funds to the Santa Clara Pueblo for their participation the project site team and to evaluate potential impacts to cultural resources from the contamination.
- EPA continues to monitor the site to ensure that there is no immediate threat to human health or the environment pending the start of long-term cleanup work.

#### Current Funding Status:

- To date, EPA has spent approximately \$2,000,000 for investigation and design work at this site.
- EPA has determined that this site does not pose an immediate threat to human health and will continue to monitor this site for changes that may trigger additional action. EPA will consider funding for this site in Fiscal Year 2004.

### **WASTES AND VOLUMES** ---

The primary contaminants detected in the ground water plume are tetrachloroethylene (commonly referred to as PCE) and trichloroethylene (commonly referred to as TCE).

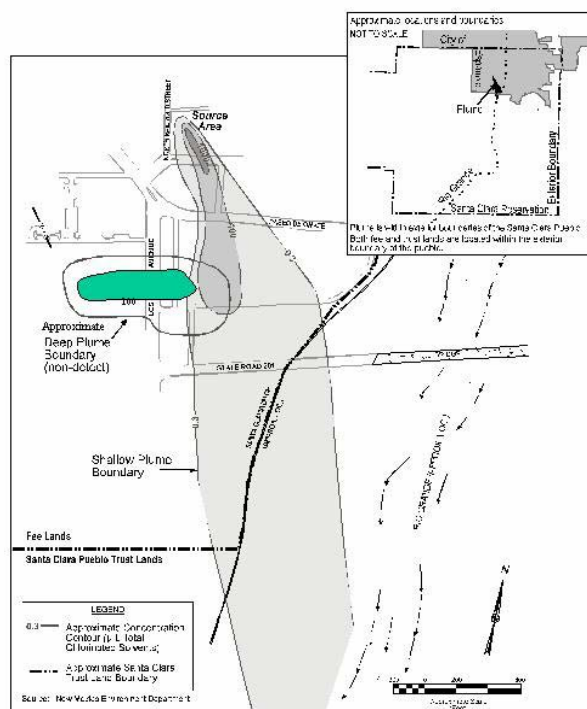
In 1996, high levels of chlorinated solvents were discovered in samples taken from the Norge Town laundromat property. The principal threat waste for the Site is a dense non-aqueous phase liquid (DNAPL) found beneath the Site, below the water table. Although the facility is the source of the groundwater plume, a lint trap and its associated piping were found to contain the highest levels of chlorinated solvents within the vicinity and is the point of origin for the contamination to groundwater. The lint trap was used to collect sand and lint from effluent discharging from the Norge Town facility and contained levels of PCE. The lint trap was cleaned out and the system has subsequently been redesigned; the lint trap no longer acts as a source of contamination.

The source area is on the Norge Town Laundromat property and is located just outside the laundromat facility. The soils near the laundromat contain PCE up to 2.2 mg/kg. The soils within the saturated zone below the laundromat contain PCE with concentrations found up to 820 mg/kg. The volume of soil contaminated with DNAPL is estimated to be 2,000 cubic feet. From soil investigations, 25 gallons of pure phase solvent are estimated to be present. Approximately 280 million gallons of ground water are affected. The shallow zone extends 800 feet long and 400 feet wide and is 100 feet below ground surface. The deeper zone is approximately the same size but extends to 260 feet below ground surface. The deeper zone is the location of the two water supply wells that were taken off-line.

### **NATIONAL PRIORITIES LIST** ---

Site Hazard Ranking System Score:	50
NPL Inclusion Proposal Date:	July 28, 1998
NPL Inclusion Final Date:	January 19, 1999
NPL Update:	No. 25
NPL Deletion Proposal Date:	n/a
NPL Final Deletion Date:	n/a

## SITE MAP



## SITE HISTORY

- 1970 The Norge Town Laundromat and Dry Cleaning facility started operating as a dry cleaners.
- 1986 The coin-operated dry cleaning machines were removed from the Norge Town Laundromat and Dry Cleaning facility. New machines were installed. The new machines consist of a closed system, except for filters and sludge.
- 1989 Chlorinated solvent contamination above drinking water standards was discovered in groundwater samples collected from two City of Española municipal supply wells, the Jemez and Bond wells. The wells were immediately removed from service.
- 1990 A Preliminary Assessment (PA) was performed by the NMEID (NMEID, 1990). PCE and TCE were identified as the Primary Contaminants of Potential Concern (PCOPCs). Groundwater was considered to be the primary pathway of concern.
- 1992 A Screening Site Inspection (SSI) Report was submitted to the U.S. Environmental Protection Agency (EPA) by the New Mexico Environment Department (NMED) for work performed in September through November 1991 (NMED, 1992b). Eighteen private wells were identified within the 1,000-foot radius of the Jemez and Bond wells. Ten of these wells were sampled during the SSI. The Cook Estate Well, one of the private irrigation wells sampled, was contaminated with PCE, TCE, and 1,2-DCE.

- 1998 Since 1998, quarterly sampling of ground water has been performed at the site to monitor fluctuations in contaminant levels and potential spread of the plume.
- 1999 In the Fall of 1999, field activities included aquifer testing to determine hydraulic parameters and to determine if different zones of the aquifer are in communication with one another. Field activities also include a source investigation to determine the extent of dense non-aqueous phase liquids in the subsurface.
- 2001 RI/FS completed. The Proposed Plan was released to the Public for official review and comment on June 25, 2001 and the comment period closed July 24, 2001. The Record of Decision was signed September 27, 2001.
- 2003 The remedial design was approved by NMED and EPA in February 2003.

## **HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT**

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There is a potential for elevated health/ecological risk levels associated with chlorinated solvents found in ground water including: Tetrachloroethylene, trichloroethylene, cis-1,2-dichloroethylene, and trans-1,2-dichloroethylene. Pathways of concern are through ingestion, inhalation, or dermal contact with contaminated well water.

Tetrachloroethylene is the leading concern at this site because it is most widespread and found in the highest concentrations.

## **RECORD OF DECISION**

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- The Record of Decision was signed on September 27, 2001.
- The selected remedy includes solvent flushing for the DNAPL component of the ground water contamination and in-situ biological treatment for the dissolved contaminants.

## **COMMUNITY INVOLVEMENT**

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Site Mailing List: Complete  
EPA Open Houses: 7/22/98, 9/23/98  
Site Status Fact Sheets: 7/98, 6/2001  
EPA Formal Meetings:

- Open House for the Santa Clara Pueblo (SCP): September, April, and October 1999;
- Open House for the City of Española: May and July 1998.
- Open House to kick-off the public comment period: June 22, 2001, El Convento, Espanola; meeting with Governor of SCP and Council members, (same date).
- Public Meetings on the Proposed Plan, July 11 (Santa Clara Pueblo) July 12, (El Convento Community Center), Espanola, NM.

Community Relations Plan:

Constituency Interest: Nearby residents concerned about personal health and supportive of EPA efforts.

Site Repository: Española Public Library, 314-A Oñate Street, N.W., Española, NM 87532, (505)753-3860  
Santa Clara Pueblo Library, Española, NM 87532, (505) 753-7326, ext. 248  
NMED Harold Runnels Bldg. 1190 St. Francis Drive, Santa Fe, NM, 505-827-2855, 1-800-879-3421  
US EPA 7<sup>th</sup> floor library, 1445 Ross Ave., Suite 12D13, Dallas, TX, 214-665-2733

## **TECHNICAL ASSISTANCE GRANT**

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Availability Notice: 4/27/98, 7/10/98, 7/22/98, 2/99, 4/27/00  
Letters of Intent Received: 4/27/98, 4/4/00  
Final Application Received: 7/27/00 - El Rio Arriba Environmental Health Association (EL RAEHA)  
1100 Paseo de Onate, Espanola, NM, 505-747-0440  
Grant Award: Awarded 03/06/01 to EL RAEHA. Budget/project period ends 3/05/04  
Environmental Health Consultants selected as Technical Advisor.  
TAG Administrator also selected.  
Status: TAG ended on 3/5/04. TAG review was conducted prior to end of grant and recipient group was not in compliance.

## **SITE CONTACTS**

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EPA Remedial Project Manager:	Petra Sanchez	214-665-6686 or 1-800-533-3508
NMED Project Managers:	Robin Brown	505-827-2434
	Chris Meehan	505-476-3777
EPA Community Involvement:		214-665-2138 or 1-800-533-3508
EPA Regional Public Liaison:	Arnold Ondarza	214-665-6790 or 1-800-533-3508
Site Attorney:	Michael Boydston	214-665-7376 or 1-800-533-3508
ATSDR:	Patrick Young	214-665-8562
NMED RD Contractor:	Intera Inc. Engineering and Services	

## **CLEANUP BENEFITS**

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Investigation of the ground water contamination identified the source of contamination, the extent of ground water contaminations and its potential threat to the public drinking water supply.

Remediation of the contaminated ground water will protect the area drinking water supply and the Rio Grande from future chlorinated solvent contamination.